REMARKS

Drawing. A corrected drawing is attached. No new matter is entered. The Examiner stated that Figs. 15(A) and 15(B) should be labeled as "prior art." These figures so labeled. A bracket is added to Fig. 15(A), as suggested.

Specification. The claims are amended as suggested by the Examiner. Withdrawal of the objection is requested.

§ 102. Claims 1, 2, 4, and 7 are rejected under § 102(b) as anticipated by Kageyama. This rejection is respectfully traversed.

The Examiner asserts that axial groove 4f of Kageyama inherently defines "a shock absorbing section … that absorbs a shock in an axial direction" as recited in claim 1. The Applicants respectfully disagree for the following reasons.

(1) The groove 4f of Kageyama is like the Applicants' notches 136a-136d, shown in Fig. 7(a), Fig. 8, or Fig. 9(c), which provide "elastic" engagement of the projections 137, according to the Applicants' specification ¶[0081]. This elasticity is in the *radial* direction, and the Applicants provide other structures for *axial* elasticity, namely, the hooked slit or spiral slit that reduce axial shock. The Examiner is referred to the Applicants' specification at ¶¶[0055]-[0056] and ¶¶[0062]-[0064].

(2) Kageyama discloses that the groove 4f provides not axial elasticity but radial elasticity (col. 4, lines 59-65). With respect, the text cited by the Examiner (col. 5, lines 52-59 and col. 7, lines 40-44) discloses *only* radial elasticity, stating that the "opposite two sections of

the engaging part 4*e* [on either side of the groove 4f] are forced toward each other" (i.e., in the radial direction). There is no teaching of axial elasticity and therefore no suggestion of axial shock absorbing (since shock absorbing must result either from elastic deformation or plastic deformation, and there is no disclosure in Kageyama that its structure is damaged, i.e., plastically deformed.

(3) The Examiner has presented no argument, or any evidence, to support her assertion of axial shock absorption; and the Applicants see no physical basis for expecting axial as well as radial elasticity from the groove 4f.

The Examiner is invited to consider that a cylindrical structure like the slider 4 is quite stiff in the axial direction, and this stiffness is but little affected by a longitudinal groove. The reason is that a column, like a cubical block, can only be reduced in height by compressing the material it is made of; there is no bending, as in a coil spring or a leaf spring (the type created by groove 4f to bend in the radial direction). The elasticity is proportional to the cross-sectional area.

Because the axial stiffness of a column like the slider 4 is so great, reducing the cross sectional area even by half still leaves a very great stiffness, and is ineffective in reducing the transmission of shock along the slider (which is the problem addressed by the Applicants---see ¶[0006]).

(4) The Examiner is invited to consider that in both the hooked and the spiral slits recited in dependent claims 5-6, the slits create a coil spring, which is a type of structure widely used for axial elasticity. (The new claims recite this structure.)

The Examiner's assertion that Kageyama discloses the Applicants' claimed axial shock absorption is seen to also be an assertion that a steel coil spring is inherently equivalent to a solid steel rod, for purposes of axial compression.

§ 103. Claims 5 and 6 are rejected under § 103(a) as unpatentable over Kageyama. This rejection is respectfully traversed.

The Examiner asserts that the claimed features are obvious as design choice. However, there is no indication that the person of ordinary skill in the art would have had these features to choose from, even if there were some motivation for choosing them (not admitted). The person of ordinary skill, by definition, does not make design changes at random but instead makes them only as suggested by the prior art, and there is no such suggestion in the applied art, either for the features themselves or for their advantages.

With respect, the rejection does not make out a *prima facie* case of obviousness as required by MPEP §§ 2143-2143.03, because two of three required elements are lacking.

The Applicants noted above that the claimed subject matter provides axial elasticity and shock absorption greater than that provided by the prior art, and thereby solves a problem (loosening of cosmetic) that is not even recognized by the applied art; and solves the problem with structures that are not disclosed by the applied art.

Claim 3. Claim 3, which was deemed allowable, is rewritten in independent form. The amendments to claim 2 which the Examiner suggested are incorporated into claim 3, which is believed to be in condition for allowance.

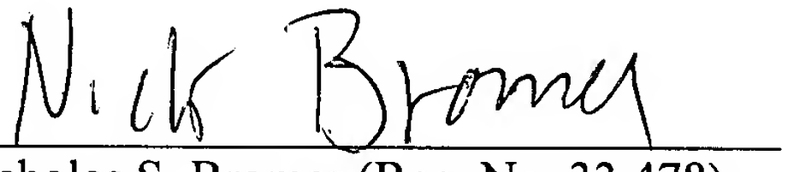
The New Claims. Claims 8 and 10 recite a generally helical structure, a smooth helix in the case of the spiral slit and a stepwise helix in the case of the hooked slit. The Examiner will understand from the Applicants' Fig. 6 that when the projection 37a snaps over the ridge of one

of the roulette spirals and moves along line R2, there is an impulse (momentum) not only in the axial direction but also in the tangential direction, because the vector R2 resolves into an axial component and a tangential component. The claimed helical structure yields elastically in both of these directions, like a coil spring (the Examiner may have noted that a coil spring resists twisting as well as compression), and therefore provides superior shock absorption. No such structure is shown in the applied art.

Withdrawal of the rejections is solicited.

Should any fee be required, please charge the same to our Deposit Account No. 18-0002 and advise us accordingly.

Respectfully submitted,



Nicholas S. Bromer (Reg. No. 33,478)
RABIN & BERDO, P.C.
Telephone: (202) 371-8976
Telefax : (202) 408-0924
(CUSTOMER NO: 23995)